

Claims

[c1] What is claimed is:

1. A device comprising:
a plurality of processing means connected to a buffer means which is connected to communication bus which is connected to a plurality of remote devices.

[c2] 2. The device according to claim 1 wherein the buffer means is a IIC buffer with a high impedance disconnection circuit.

[c3] 3. The device according to claim 1 wherein a IIC protocol is used.

[c4] 4. The device according to claim 1 wherein the buffer means is an IIC buffer and the buffer is connected by a high impedance disconnection circuit to the processing means, and which said disconnection circuit will disconnect said IIC buffer based on a.BUS_En signal.

[c5] 5. The device according to claim 1 wherein said remote device is connected to a peripheral device.

[c6] 6. The device according to claim 1 wherein said remote device is a microcontroller.

[c7] 7. The device according to claim 1 wherein said remote device is comprised of a microcontroller, RAM memory, ROM memory, a non-volatile memory, an IIC communication port with SCL and SDA lines, an I/O port for interconnection with a peripheral device, a relay port with COM, NC and NO contacts, an ADC converter for analogical voltage readings, a timer WDT, a POWER conditioning system, and an information processing means.

[c8] 8. The device according to claim 1 wherein the communication bus is connected to the remote device through a high impedance disconnection means.

[c9] 9. The device according to claim 1 wherein the buffer is a bi-directional IIC buffer which amplifies the signal on the communication bus.

[c10] 10. The device according to claim 1 wherein said remote device will have a default address when added to the communication bus, and said processing

means issues a general config address command to a plurality of remote devices through the communication bus, which will put the remote devices into a wait status, and when the processing means issues a general command address to all the remote devices on the communication bus the remote devices will act as being addressed with their address.

[c11] 11. The device according to claim 1 wherein said the high impedance switch makes it possible to use of two networks of different speeds connected to the same master.

[c12] 12. A process for connecting a serial communication network to remote devices comprising the steps of:
Connecting a plurality of processing means to a buffer means, connecting the buffer means to a communication bus and connecting the communication bus to a plurality of remote devices.

[c13] 13. The process according to claim 11 wherein the buffer means is an IIC buffer with a high impedance disconnection circuit.

[c14] 14. The process according to claim 11 wherein a IIC protocol is used.

[c15] 15. The process according to claim 11 wherein the buffer means is an IIC buffer and includes connecting the buffer with a high impedance disconnection circuit to the processing means, and having said disconnection circuit disconnecting said IIC buffer based on a BUS_En signal.

[c16] 16. The process according to claim 11 which includes the step of connecting said remote device is connected to a peripheral device.

[c17] 17. The process according to claim 11 wherein said remote device is a microcontroller.

[c18] 18. The process according to claim 11 wherein said remote device is comprised of a microcontroller, RAM memory, ROM memory, a non-volatile memory, an IIC communication port with SCL and SDA lines, an I/O port for interconnection with a peripheral device, a relay port with COM, NC and NO contacts, an ADC converter for analogical voltage readings, a timer WDT, a POWER conditioning

system, and an information processing means.

- [c19] 19.The process according to claim 11 which includes the step of connecting the communication bus to the remote device through a high impedance disconnection.
- [c20] 20.The process according to claim 11 which adds the step of amplifying the signal on the communication bus using a bi-directional IIC buffer.
- [c21] 21.The process according to claim 11 which includes the steps of having a default address for the remoted device, having the processing means issue a general config address command to a plurality of remote devices through the communication bus, putting the remote devices into a wait status, and having the processing unit issue a general command address all the remote devices and having the remote devices acting as being addressed with their address.
- [c22] 22.The device according to claim 11 wherein said the high impedance switch makes it possible to use of two networks of different speeds connected to the same master.